

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**LISTING OF CLAIMS:**

1. (Currently Amended) A high emissivity radiator comprising a substrate, an amorphous carbon layer and a metallic ~~carbide-forming~~ carbide layer interposed between the substrate and the amorphous carbon layer.
2. (Currently Amended) The radiator of claim 1, wherein the metallic ~~carbide-forming~~ carbide layer comprises titanium.
3. (Previously Presented) The radiator of claim 1, wherein the amorphous carbon layer and/or the titanium layer has a thickness in the range of 0.1 micrometres to 1.0 micrometres.
4. (Previously Presented) The radiator of claim 1, wherein the amorphous carbon layer is protected by a protective layer.
5. (Original) The radiator of claim 4, wherein the protective layer is substantially transparent to infrared radiation.

6. (Original) The radiator of claim 5, wherein the protective layer comprises at least one of SiC, SiO<sub>2</sub>, diamond and diamond-like carbon.
7. (Original) A method of making a high emissivity radiator comprising the steps of forming a metallic carbide-forming layer on a substrate and forming an amorphous carbon layer on the metallic carbide-forming layer.
8. (Original) The method of claim 7, wherein the amorphous carbon layer and/or the metallic carbide forming layer is formed by sputter deposition or evaporation.
9. (Previously Presented) The method of claim 7, further comprising the step of forming a protective layer on top of the amorphous carbon layer.
10. (Previously Presented) The method of claim 7, wherein the radiator is annealed after the steps of forming the metallic carbide-forming and amorphous carbon layers.
11. (Cancelled)
12. (Cancelled)
13. (New) A radiator comprising a substrate, a soft amorphous carbon layer and a metallic carbide layer interposed between the substrate and the amorphous carbon layer.

14. (New) The radiator of claim 13, being a high emissivity radiator.
15. (New) The radiator of claim 13 wherein the amorphous carbon layer is an annealed amorphous carbon layer.
16. (New) A method of making a radiator comprising the steps of providing a metallic carbide-forming layer on a substrate and forming a soft amorphous carbon layer on the metallic carbide-forming layer.
17. (New) The method of claim 16 wherein the radiator is a high-emissivity radiator.
18. (New) The method of claim 16 wherein the metallic carbide-forming layer is provided on an integral surface layer of the substrate.
19. (New) The method of claim 16 wherein the metallic carbide-forming layer is provided as a separate layer on a surface of the substrate.
20. (New) The radiator of claim 2, wherein the amorphous carbon layer and/or the titanium layer has a thickness in the range of 0.1 micrometres to 1.0 micrometres.
21. (New) The radiator of claim 2, wherein the amorphous carbon layer is protected by a protective layer.

22. (New) The radiator of claim 2, wherein the amorphous carbon layer is protected by a protective layer.
23. (New) The method of claim 8, wherein the radiator is annealed after the steps of forming the metallic carbide-forming and amorphous carbon layers.
24. (New) The method of claim 9, wherein the radiator is annealed after the steps of forming the metallic carbide-forming and amorphous carbon layers.